

Date: Tuesday, 10/3/2006 3:48:06 PM
 User: Kim Johnston

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services Drawing Name : TOW RING
 Job Number : 28865
 Estimate Number : 10400
 P.O. Number : N/A Part Number : D2968043
 This Issue : 10/3/2006 S.O. No. : N/A Drawing Number : D2968
 Prsht Rev. : NC Project Number : N/A
 First Issue : N/A Type : MACHINED PARTS Drawing Revision : B1
 Previous Run : 28268 Material : N/A
 Due Date : 10/30/2006 Qty: 20 Um: Each
 Written By : [Signature]
 Checked & Approved By : [Signature]
 Comment : Est: C 03.06.11 Reformat; Incorporated D2968-1/-5 KJ/RF

Additional Product

Job Number:



Seq. #: Machine Or Operation: Description :

1.0 28865A STEM



Comment: Sub-Component STEM
 D2968-3 B 28865A

[Signature] 06.11.10

22

2.0 28865B RING



Comment: Sub-Component RING
 D2968-5 B 28865B

[Signature] 06.11.10

22

3.0 LARGE FAB 1 LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1
 Weld D2968-3 & D2968-5 as per Dwg D2968 & QSI 004 using 4130 welding rod Identify as D2968-043
 Batch: M15684

[Signature] 06.11.10

22

4.0 QC5/9 WELD INSPECTION



Comment: WELD INSPECTION

[Signature] 06/14/13 (22)

5.0 PG PURCHASING



Comment: PURCHASING
 Issue P/O: 2473
 Description: D2968-043 to heat treat to ultimate tensile strength
 125ksi as per Dwg D2968
 Conformity sheet required

C20611113 (22)

Issue P/O: 2474
 Cad Plate per QQ-P-416F Class I Type II

C20611113 (22)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes ☐ No ☒ DQA: LD Date: 04/12/08
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Tuesday, 10/3/2006 3:48:07 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: TOW RING

Job Number: 28865

Part Number: D2968043

Job Number:



Seq. #:

Machine Or Operation:

Description :

Conformity sheet required

6.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Receive & Inspect For Transit Damage

Ensure certificate of conformity is attached

PK 6/12/07 (22)

7.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT CAD PLATE

Job 12-07 (22)

8.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING

Powder Coat White Gloss (Ref: 4.3.5.2) as per QSI 005 4.3

DO NOT POWDER COAT THREADS

a.m / m.h *06/12/06* (22)

9.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT

FC 061208 (22)

10.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: *5113*

PK 1/14/8 (22)

11.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

PK 06/12/08

Job Completion



11-06-12-08

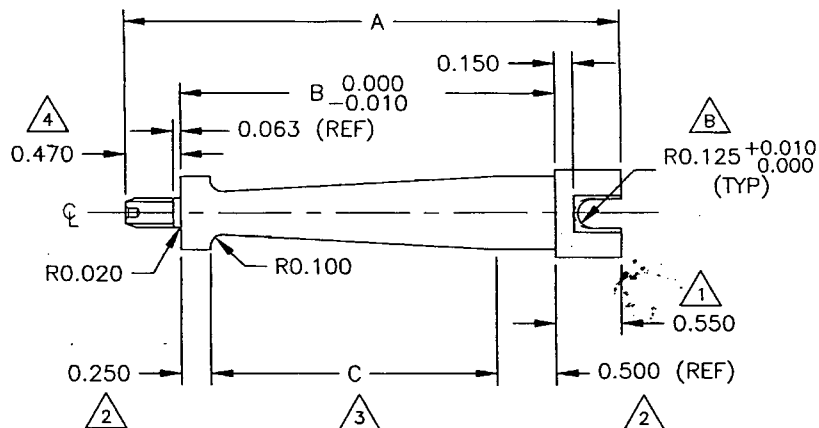
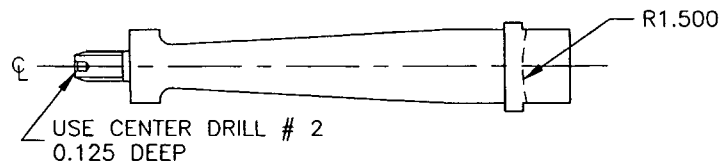
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



PART NUMBER	A	B	C
D2968-1	5.040	4.020	3.270
D2968-3	4.200	3.180	2.430

D2968-1/-3 STEM

D2968-1 AND D2968-3 STEM:

MATERIAL: AISI 4130

△ Ø0.750 O.D.

△ Ø0.625 O.D.

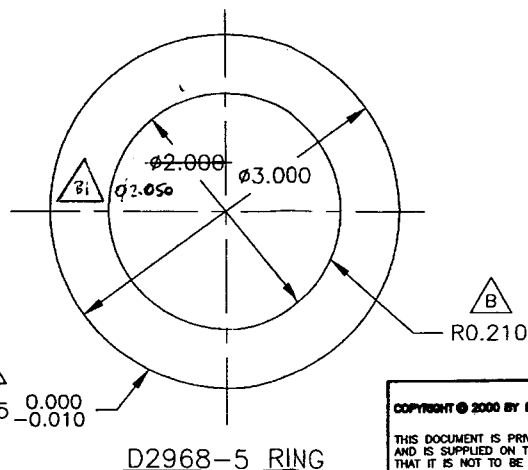
△ MACHINE UNIFORM TAPER FROM Ø0.363 O.D. TO Ø0.625 O.D.

△ 1/4-28 UNF THREAD WITH 0.063 GRIP
MACHINE ALL INSIDE EDGES WITH A 0.010 RADIUS
UNLESS OTHERWISE INDICATED
TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

D2968-5 RING:

MATERIAL AISI 4130

TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

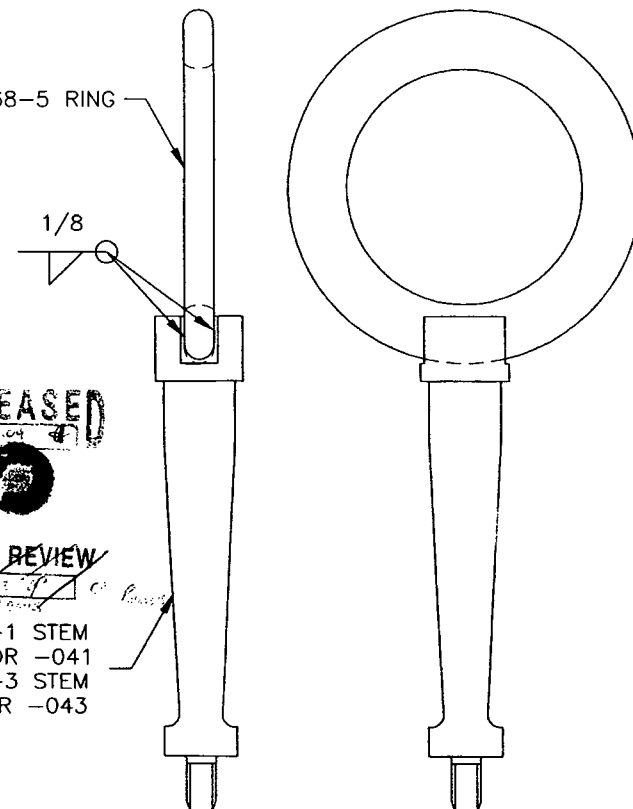


D2968-5 RING

RELEASED

UNDER REVIEW

USE 2968-1 STEM FOR -041
USE 2968-3 STEM FOR -043



D2968-041 AND D2968-043 TOW RING:

WELD PER QSI 004 ON ALL EDGES BETWEEN STEM AND RING
HEAT TREAT TO MIN ULTIMATE TENSILE STRENGTH OF 125 KSI
FINISH: CAD PLATE ENTIRE ASSEMBLY PER
QQ-P-416F CLASS I TYPE II
POWDER COAT WHITE (REF 4.3.5.2) PER DART
QSI 005 4.3 (EXCEPT THREADS)
TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

B	00.05.31	R0.125 AND R0.210 WERE 0.060 x 45°
A	00.03.07	NEW ISSUE
DESIGN	RF	DART DART AEROSPACE LTD. HARRISBURG, ONTARIO, CANADA
CHECKED	RF	DRAWING NO. D2968
DATE	00.05.31	TOW RING

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SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 28865

MANCO DOMPLEX

8895 Crescent 3
Anjou (Québec) H1J 1B6
Tél.: 514-355-7867
Fax: 514-355-8750

CERTIFICAT DE CONFORMITÉ CERTIFICATE OF COMPLIANCE

13001

DART Aerospace Ltd

Client / Customer

P02474 ✓

Votre # de commande / Your purchase order #

D2918043 B28865

de la pièce / part

102379

Notre # de bon de livraison / Our packing slip #

Inspecteur / Inspector	<u>Renault</u>	Date, équipe / Date, shift	<u>Dec 05, 2006</u>
Placage / Plating	<u>QQA 416 P CLASS 1 T-1/2 II</u>		
Quantité totale / Total quantity	<u>22</u>	Quantité inspectée / Inspected quantity	<u>22</u>
Adhésion / Adhesion	<u>good</u>		
Épaisseur / Thickness	L.C.D.	H.C.D.	Moy. / aver. <u>0.0005</u>
Coulisses, taches / Leach, spots	<u>non</u>	Rugosité / Roughness	<u>non</u>
Quantité approuvée / Approved quantity	<u>22</u>	Quantité rejetée / Rejected quantity	<u>—</u>

Commentaires / Comments

Nous certifions que les pièces énumérées ci-dessus ont été faites en conformité avec vos dessins et spécifications et rencontrent les exigences contenues dans ces dessins et/ou spécifications.

We hereby certify that the parts listed above have been made in accordance with your drawings and specifications and are correct to the requirements contained in those drawings and/or specifications.

Signé au nom de
Signed on behalf of

**MANCO
DOMPLEX**


VAC AERO
INTERNATIONAL INC.

RELEASE NOTE

GST No.: R105468102

OAK 81501-1



HEAD OFFICE

 1371 SPENCER ROAD, OAKVILLE, ONTARIO
CANADA L6L 2X5
TEL: (905) 827-4171 FAX: (905) 827-7489


2009 WYECROFT ROAD, UNIT B

 OAKVILLE, ONTARIO
CANADA L6L 6J4
TEL: (905) 827-7377 FAX: (905) 827-1380


QUEBEC DIVISION

 7450 RUE VERTE STREET, ST. LAURENT, QUEBEC
CANADA H4S 1C5
TEL: (514) 334-4240 FAX: (514) 334-6269

11/29/2006

MM/DD/YYYY

PAGE: 1

BILL TO:

1DAR01

 DART AEROSPACE LTD.
1270 ABERDEEN ST.
HAWKESBURY, ON

 SHIP TO: MANCO COMPLEX
4660 HICKMORE
ST. LAURENT, QC

K6A 1K7

H4T 1K2

DATE SHIPPED	SHIP VIA	F.O.B.
11/29/2006	PUROLATOR # 7684382	ORIGIN
CUSTOMER P/O No.	JOB No.	TERMS
PO00002473		COD

PART No.	DESCRIPTION	UOM	QTY ORD	QTY SHPD	TEST RESULTS
D2968-043	Process Specifications: Procedure: 4047 HEAT TREATED TO 125 KSI MIN. 100 % HARDNESS TESTED PER ASTM E-18 MATERIAL: 4130 B28865	EA	22	22	<div data-bbox="990 1017 1518 1208" style="border: 1px solid black; padding: 5px;"> 100% HARDNESS TESTED 22 pcs. 29/30 HRC </div> <div data-bbox="1234 1234 1331 1340" style="border: 1px solid black; border-radius: 50%; padding: 5px; display: inline-block;"> VALQ TH. 28 Q.C. </div>

I hereby certify that the material covered by this release note has been inspected and tested and conforms to all specifications relevant thereto in accordance with the conditions of the contract / or purchase order.

ON BEHALF OF VAC AERO INTERNATIONAL INC.

 Authorized Q.C. Inspector

 VACUUM BRAZING - HEAT TREATING - SPECIAL PROCESSING - FURNACE EQUIPMENT
 TURBINE COMPONENT OVERHAUL - PLASMA AND OTHER COATINGS
